

Comparability of FoodNet and United States Populations

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Background: A key objective of the Centers for Disease Control and Prevention's Foodborne Disease Active Surveillance Network (FoodNet) is to estimate the burden of foodborne illness in the United States. FoodNet activities, however, are conducted within selected state health departments. The selection of these sites was not chosen to be representative of the U.S. population. We therefore evaluated the comparability of the FoodNet population to the U.S. population on the basis of several demographic characteristics and health indicators.

Methods: Using 1996 U.S. Census data, we performed a demographic comparison of the original FoodNet population (Minnesota, Oregon and selected counties in California, Connecticut and Georgia) and U.S. population on the basis of age, gender, race and urban residence (metropolitan statistical area (MSA) distribution). Using Community Health Status Indicator (CHSI) Project data, we also compared the two populations on the basis of population density (persons per square mile) and percent at or below poverty. For the purpose of this investigation, poverty is defined as having a household income less than the poverty thresholds established by the U.S. Census Bureau. These thresholds vary by family size and composition.

Results: The original FoodNet (count: 14,281,096) and U.S. (count: 265,189,794) populations had similar age and gender distributions, but differed slightly with regard to race. The Asian population was overrepresented (FoodNet: 6%, U.S.: 4%). The Black and Hispanic populations were underrepresented (FoodNet: 11% and 6%, U.S.: 13% and 12%, respectively). The populations also differed in their proportion of urban residents (FoodNet: 99%, U.S.: 80%). County-level comparison indicated a lower population density among the 135 FoodNet counties (FoodNet: median= 31 persons per square mile; U.S.: median= 41 persons per square mile). The FoodNet population also had a smaller percentage of persons living at or below poverty (FoodNet: 11%; U.S.: 15%).

Conclusions: The generalizability of FoodNet studies is somewhat limited due to slight demographic differences (e.g., Hispanic and Asian populations). Despite these differences, however, the distribution of the FoodNet population across several other demographic factors and health indicators is similar to that of the U.S. population. These data support the generalizability of FoodNet data to the U.S. population for the purpose of understanding the epidemiology of foodborne illness. Every year since its inception, the FoodNet catchment area has increased from approximately 14 million in 1996 to 34 million in 2001. Further analysis is being conducted to compare the expanding FoodNet population with the U.S. population.

Suggested citation:

Hardnett F, Hoekstra R, Kennedy M, Angulo F, and the EIP FoodNet Working Group. Comparability of FoodNet and United States Populations. International Conference on Emerging Infectious Diseases. Atlanta, GA, March 2002.